

AMENDMENT TO THE CLAIMS

Please rewrite the claims as follows:

Claims 1-12 (Canceled)

13. (Currently Amended) An image sensing device comprising:
 a plurality of pixels arranged to sense an object; and
 a switch arranged to switch, respectively, first horizontal and vertical
linear correction data and second horizontal and vertical linear correction data in
accordance with a position of a pixel of interest among the plurality of pixels; the
first correction data being commonly used for correcting at least first and second
pixels of the plurality of pixels, the second correction data being used for
correcting a third pixel of the plurality of pixels.

14. (Currently Amended) An image processing apparatus for processing an
image sensed by a plurality of pixels, the apparatus comprising:
 a switch arranged to switch, respectively, first horizontal and vertical
linear correction data and second horizontal and vertical linear correction data in
accordance with a position of a pixel of interest among the plurality of pixels; the
first correction data being commonly used for correcting at least first and second
pixels of the plurality of pixels the second correction data being used for
correcting a third pixel of the plurality of pixels.

15. (Currently Amended) An image processing method for processing an image sensed by a plurality of pixels the method comprising:

respectively switching first horizontal and vertical linear correction data and second horizontal and vertical linear correction data in accordance with a position of a pixel at interest among the plurality of pixels; the first correction data being commonly used for correcting at least first and second pixels of the plurality of pixels, the second correction data being used for correcting a third pixel of the plurality of pixels.

16. (Currently Amended) A memory medium storing an image processing program for processing an image sensed by a plurality of pixels, the program comprising:

respectively switching [[for]] first horizontal and vertical linear correction data and second horizontal and vertical linear correction data in accordance with a position of a pixel of interest among the plurality of pixels; the first correction data being commonly used for correcting at least first and second pixels of the plurality of pixels, the second correction data being used for correcting a third pixel of the plurality at pixels.

17. (Previously Presented) An Image sensing device comprising;

an image sensing element having a two-dimensional matrix of pixels arranged in horizontal and vertical directions;

a memory arranged to store plural sets of horizontal linear correction data commonly used for correcting at least two of the matrix of pixels and/or plural sets of vertical linear correction data commonly used for correcting at least two of the matrix of pixels;

a selector arranged to select linear correction data from the plural sets of linear correction data stored in the memory in accordance with a position of a pixel of interest among the matrix of pixels; and
a calculator arranged to correct an image sensed by the image sensing element by using selected linear correction data.

18. (Previously Presented) The device according to claim 17, wherein the image sensing element includes a color filter, and linear correction data to be selected by the selector are different from each other depending on whether a pixel of interest is in an odd line or in an even line.

19. (Previously Presented) The device according to claim 17, wherein the selector is further arranged to select linear correction data from the plural sets of linear correction data in accordance with one of focal distance, field angle, and diaphragm of a photographing optical system or a combination thereof.

20. (Previously Presented) An image processing apparatus for processing an image sensed by an image sensing element having a two-dimensional matrix of pixels arranged in horizontal and vertical directions, the apparatus comprising:

a memory arranged to store plural sets of horizontal linear correction data commonly used for correcting at least two of the matrix of pixels and/or plural sets of vertical linear correction data commonly used for correcting at least two of the matrix of pixels;

a selector arranged to select linear correction data from the plural sets of linear correcting data stored in the memory in accordance with a position of a pixel of interest among the matrix of pixels; and

a calculator arranged to correct an image sensed by the image sensing element by using selected linear correction data.

21. (Previously Presented) An image processing method for processing an image sensed by an image sensing element having a two-dimensional matrix of pixels arranged in horizontal and vertical directions, the method comprising:

storing in a memory plural sets of horizontal linear correction data commonly used for correcting at least two of the matrix of pixels and/or plural sets of vertical linear correction data commonly used for correcting at least two of the matrix of pixels; and

correcting an image sensed by the image sensing element by using linear correction data selected from the plural sets of linear correction data stored in the memory.

22. (Previously Presented) A memory medium storing an image processing program for processing an image sensed by an image sensing element having a

two-dimensional matrix of pixels arranged in horizontal and vertical directions,

the program comprising:

storing in a memory plural sets horizontal linear correction data commonly used for correcting at least two of the matrix of pixels and/or plural sets of vertical linear correction data commonly used for correcting at least two of the matrix of pixels; and

correcting an image sensed by the image sensing element by using linear correction data selected from the plural sets of linear correction data stored in the memory.